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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/737,348

12/15/2003

Billy S. Vaughan

Vaughan.B-05

5991

22197 7590 11/24/2008
PATENT LAW & VENTURE GROUP
2424 S.E. BRISTOL, SUITE 300
NEWPORT BEACH, CA 92660

EXAMINER

PHAM, LAM P

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

11/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/737,348	Applicant(s) VAUGHAN, BILLY S.	
	Examiner LAM P. PHAM	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/1/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 16, 18 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by **Norman** et al. (US 6,674,259).

Re claim 1, Norman discloses a vehicle and indicator apparatus comprising:

a remote-controlled vehicle (116a-116d); a power supply (battery 408) operably connected to the remote-controlled vehicle; a low-power indicator circuit (not shown) operably connected to the power supply; and at least one low-power indicator (LED in controller alert 1010, figure 10B) operably connected to the low-power indicator circuit and configured to be enabled when a low-power condition is present as seen in figures 1, 6, 10A, 10B; col. 13, lines 30 to col. 14, lines 48.

Re claim 2, Norman disclose the at least one low-power indicator comprises a visible indicator (LED) mounted on the remote-controlled vehicle as seen in figure 10B; col. 14, lines 25-41.

Re claim 16, Norman disclose a controller (OI 114a) configured to enable remote control of the remote-controlled vehicle, wherein the at least one low-power indicator

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comprises a visible indicator (1002 LED) mounted on the controller as seen in figure 10A; col. 14, lines 1-24.

Re claim 18, Norman discloses a vehicle and indicator apparatus comprising:

a remote-controlled vehicle; a power supply operably connected to the remote-controlled vehicle; a low-power indicator circuit operably connected to the power supply; and a means for indicating low power of the power supply operably connected to the low-power indicator circuit as seen in claim 1 for explanation.

Re claim 22, Norman disclose a method of indicating low power of a remote-controlled vehicle, comprising the steps of: operating the remote-controlled vehicle so as to decrease a power supply connected to the remote-controlled vehicle; detecting a low power condition of the power supply as the remote-controlled vehicle is operated; and actuating at least one low-power indicator when the low power condition is detected to indicate low power of the power supply as seen in claim 1 for explanation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al.

Re claim 17, Norman discloses the remote-controlled vehicle is a land vehicle and fails to disclose the vehicle is also a boat and an aircraft. One of ordinary skilled in the art would realize that low power indicator of Norman can be incorporated into various vehicles whether it is a land vehicle or a boat or airborne vehicle such that a low power condition is indicated effectively for user awareness. Thus, it would have been obvious to one skilled artisan to realize that the remote-controlled vehicle is selected from the group consisting of a land vehicle, boat and an aircraft and others as applicable.

5. Claims 3-4, 8-9, 19, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al. in view of **Epstein** et al. (US 6053752).

Re claims 3-4, Norman fails to disclose the visible indicator comprises a streamer device comprising: a selectively-openable chamber formed on the remote-controlled vehicle and operably connected to the low-power indicator circuit; and at least one streamer housed within the chamber and attached on one end to the chamber such that opening the chamber under control of the low-power indicator circuit releases the at least one streamer so as to stream behind the remote-controlled vehicle and visibly indicate low power.

However, Epstein in analogous art teach of a smoke detector mounted to a ceiling having a low power indicator (62) using a long flexible member (86) that is released to hang down from within a chamber housed by the detector when a low power condition is detected that open the chamber. The long flexible member is a strip of

plastic or cloth that behaves like a streaming device in the air as seen in figures 3-5, and 8; col. 5, lines 55-68; col. 6, lines 1-35.

In view of Epstein teaching regarding a low power indicator using a streamer device, it would have been obvious to one of ordinary skilled in the art to incorporate the streamer device as taught by Epstein into the remote controlled vehicle of Norman such that a low power condition is visibly alerted using the streamer device at a distance.

Re claim 8, Norman fails to disclose the at least one low-power indicator comprises an audible indicator mounted on the remote-controlled vehicle.

Epstein in analogous art teaches of using a low power indicator using both an audible alarm (beeping horn) and visible alarm (streamer device 86, flashing light LED 124) as seen in figures 6-7; col. 7, lines 1-68; col. 8, lines 1-9. In view of Epstein teaching regards the audible indicator for indicating low power condition, it would have been obvious to one of ordinary skilled in the art to incorporate such audible indicator into the vehicle of Norman to indicate when a low power condition exist in the vehicle.

Re claim 9, Norman and Epstein combinedly teach the at least one low-power indicator comprises an audible indicator mounted on the remote-controlled vehicle so as to be selectively audible at a selected distance from the remote-controlled vehicle; and a visible indicator mounted on the remote-controlled vehicle so as to be selectively visible at a selected distance from the remote-controlled vehicle as seen in claim 1 and 8 for explanation.

Re claim 19, Norman and Epstein combinedly disclose a vehicle and indicator apparatus comprising:

a remote-controlled vehicle; a power supply operably connected to the remote-controlled vehicle; a low-power indicator circuit operably connected to the power supply; and a mechanical low-power indicator (strip released mechanism of Epstein) mounted on the remote-controlled vehicle and operably connected to the low-power indicator circuit as seen in claims 1 and 4 for explanation.

Re claim 21, Norman discloses a vehicle and indicator apparatus comprising:

a remote-controlled vehicle; an electrical battery operably connected to the remote-controlled vehicle; a low-battery life indicator circuit operably connected to the battery; and at least one low-battery life indicator operably connected to the low-battery life indicator circuit so as to be deployed when the electrical battery has a low battery life, the low-battery life indicator engaged with the vehicle and visible from an exterior position relative thereto; refers to claim 19 for explanation.

Re claim 26, Norman and Epstein combinedly disclose comprising the steps of: operably connecting a low-power indicator circuit to the power supply; mounting the at least one low-power indicator on the remote-controlled vehicle so as to be mechanically operated by the low-power indicator circuit; operating the at least one low-power indicator under control of the low-power indicator circuit to visibly extend the at least one low-power indicator from the remote-controlled vehicle as seen in claim 7 for explanation.

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al. in view of **Daifotes** (US 4052697).

Re claims 5-6, Norman fails to disclose the visible indicator comprises a flag device comprising: a staff mounted to the remote-controlled vehicle so as to have a pivotable fixed end and an opposite free end, the staff being operably connected to the low-power indicator circuit; and a flag attached to the staff substantially at the free end such that pivoting the staff about the fixed end under control of the low-power indicator circuit extends the free end away from the remote-controlled vehicle so as to fly the flag and visibly indicate low power.

Daifotes in analogous art teaches of an emergency blinker and flag display for indicating or warning an emergency condition to others at a distance. The flag display comprises a staff mounted to the vehicle so as to have a pivotable fixed end and an opposite free end, the staff being operably connected to the indicator circuit; and a flag attached to the staff substantially at the free end such that pivoting the staff about the fixed end under control of the indicator circuit extends the free end away from the vehicle so as to fly the flag and visibly indicate low power as seen in figures 1-8; col. 2, lines 28-68 and col. 3, lines 65.

In view of Daifotes teaching regarding the flag display for indicating an emergency condition to others at a distance, it would have been obvious to one of ordinary skill in the art to provide the same to the indicator circuit of Norman such that a low power condition of the vehicle is visibly indicated at a distance to the user of the vehicle effectively.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al. in view of Gawlick et al. (US 3520275).

Re claim 7, Norman fails to disclose the visible indicator comprises a smoke device comprising a smoke source formed on the remote-controlled vehicle and operably connected to the low-power indicator circuit such that actuating the smoke source under control of the low-power indicator circuit releases smoke from the smoke source so as to emanate from the remote-controlled vehicle and visibly indicate low power.

Smoke has been well known for use in signaling a condition or location of event. Gawlick et al. in smoke signal body teach of a smoke releasing device for releasing smoke to signal a condition as seen in col. 1, lines 13-51.

In view of Gawlick teaching regarding smoke releasing device for signaling a condition, it would have been obvious to one of ordinary skilled in the art to provide the smoke releasing device in the vehicle of Norman such that a low power condition is indicated using smoke when the low power circuit detected the condition.

8. Claim 10-14, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al. in view of **Munson** (US 5900734).

Re claim 10, Norman fail to disclose expressly the power supply provides an operating voltage within a predetermined voltage range having a nominal voltage; and the low-power indicator circuit is configured to detect the operating voltage and to enable actuation of the at least one low-power indicator when the operating voltage falls outside the voltage range.

Munson in same field of endeavor teaches of a low battery voltage warning system for vehicle, comprising the power supply (14) provides an operating voltage

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within a predetermined voltage range (from 9 volt to battery terminal voltage) having a nominal voltage; and the low-power indicator circuit (20, 24 and 26) is configured to detect the operating voltage (voltage sensor 20) and to enable actuation of the at least one low-power indicator (audible 54, visual 52) when the operating voltage falls outside the voltage range as seen in figures 2-5; col. 3, lines 46 to col. 4, lines 64.

In view of Munson teaching regarding the low power indicating circuit providing an alarm signal when the detected operated voltage is outside the voltage range, it would have been obvious to one of ordinary skilled in the art to provide the same to the low power indicator system of Norman such that a low power condition is indicated when the operating voltage is outside the voltage range unsafe for the vehicle.

Re claim 11, Norman and Munson disclose the at least one low-power indicator comprises a visible indicator (LED) mounted on the remote-controlled vehicle as seen in claim 2 for explanation.

Re claim 12, Norman and Munson combinedly disclose the at least one low-power indicator comprises an audible indicator and a visible indicator mounted on the remote-controlled vehicle as seen in claim 10 for explanation.

Re claim 13, Norman and Munson combinedly disclose the low-power indicator circuit is configured to detect when the operating voltage is within a first outside range defined as outside the voltage range and no more than a cut-off percentage below the nominal voltage and to enable actuation of the audible indicator when the operating voltage falls within the first outside range; and the low-power indicator circuit is further configured to detect when the operating voltage is within a second outside range

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defined as more than the cut-off percentage below the nominal voltage and to enable actuation of the visible indicator when the operating voltage falls within the second outside range as seen in col. 5, lines 1-38.

Re claim 14, Norman and Munson combinedly disclose the low-power indicator circuit is configured to detect when the operating voltage is within an outside range defined as more than a cut-off percentage below the nominal voltage and to enable simultaneous actuation of the audible and visual indicators when the operating voltage falls within the outside range as seen in figures 4-7; col. 5, 6-27.

Re claim 23, Norman and Munson combinedly disclose the steps of detecting an operating voltage of the power supply as the remote-controlled vehicle is operated; comparing the operating voltage to a desired voltage range as set in a low-power indicator circuit operably connected to the power supply; and controlling the actuation of the at least one low-power indicator through the low-power indicator circuit as seen in claim 10 for explanation.

Re claim 24, Norman and Munson combinedly disclose comprising the further steps of: setting a first outside range in the low-power indicator circuit; actuating an audible indicator of the at least one low-power indicator when the operating voltage falls within the first outside range; setting a second outside range in the low-power indicator circuit; and actuating a visible indicator of the at least one low-power indicator when the operating voltage falls within the second outside range as seen in claim 13 for explanation.

9. Claims 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al. in view of **Jimenez** et al. (US 6609945).

Re claim 15, Norman fail to disclose the power supply comprises an engine and a tank providing fuel to the engine, the tank including a fuel gage configured with a low level setting; and the low-power indicator circuit is operably connected to the fuel gage and is configured to enable actuation of the at least one low-power indicator when the fuel in the tank falls to the low level setting.

Jimenez et al. in same field of endeavor teach of a radio-controlled toy vehicle (1) driven by motors (5, 6, 7) that use fuel for powering the motors and the vehicle has a low fuel indicator (light 9) for indicating a low fuel condition as seen in figure 1; col. 5, lines 1-32.

In view of Jimenez teaching regarding the low fuel indicator for remote control vehicle, it would have been obvious to one of ordinary skilled in the art to recognize that for vehicle that is powered by motors or engine using fuel, a low fuel indicator is also incorporated in similar way to the battery indicator to indicate a low power or low fuel condition.

Re claim 25, Norman fail to disclose comprising the further steps of detecting a fuel level in a tank providing fuel to an engine as the remote-controlled vehicle is operated; comparing the fuel level to a low level setting of a fuel gage operably connected to a low-power indicator circuit; and controlling the actuation of the at least one low-power indicator through the low-power indicator circuit.

Jimenez et al. in same field of endeavor teach of a radio-controlled toy vehicle (1) driven by motors (5, 6, 7) that use fuel for powering the motors or engine and the vehicle has a low fuel indicator (light 9) for indicating a low fuel condition when the fuel drops to a low level as seen in figure 1; col. 5, lines 1-32.

In view of Jimenez teaching regarding the low fuel indicator for remote control vehicle, it would have been obvious to one of ordinary skilled in the art to recognize that Jimenez teaches step of detecting a fuel level in a tank and comparing the fuel level to a low level threshold and controlling the actuation of the low fuel indicator, that could be incorporated into the system of Norman to indicate a low power or low fuel condition.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al. in view of Epstein et al. and Daifotes and Gawlick et al.

Re claim 20, Norman and Epstein and Daifotes and Gawlick combinedly disclose the mechanical low-power indicator is selected from the group consisting of a streamer device, a flag device and a smoke device as seen in claim 3-7 for explanation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM P. PHAM whose telephone number is (571)272-2977. The examiner can normally be reached on 10AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin C Lee can be reached on 571-272-2963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 20, 2008

Lam P Pham
Examiner
Art Unit 2612

/Benjamin C. Lee/
Supervisory Patent Examiner, Art Unit 2612